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BEFORE THE SUBCOMMITTEE ON COAST GUARD AND NAVIGATION
OF THE
HOUSE COMMITTEE ON MERCHANT MARINE AND FISHERIES

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Good morning, Mr. Chairman. I am pleased to be here today to participate in the Subcommittee on Coast Guard and Navigation's hearing on pipeline safety in the marine environment, with specific focus on the relationship of pipeline operations and fishing vessel operations in the Gulf of Mexico. This hearing is, in part, in response to the October 1989 incident where a fishing vessel struck an exposed offshore natural gas pipeline near Sabine Pass, Texas. The Research and Special Programs Administration (RSPA), and more specifically the Office of Pipeline Safety (OPS), is responsible for the federal pipeline safety program. In this testimony, I would like to provide a general description of our program, a scope of the issues from our perspective, initiatives that we have underway in the regulatory and enforcement arena, and actions we are taking to work with other federal agencies that may have a role in assuring safety in offshore areas, including the Gulf of Mexico.

At the outset, I would like to express my concern and sympathy for the families and friends of the crew of the Northumberland. I know the excellent safety record of pipeline transportation is of little consolation in the face of the loss that they suffered.

Unfortunately, we do not live in a risk free society. However, it is our mandate to work to minimize those risks. Administrator Travis Dungan pledges the support of our agency to work with this subcommittee and other concerned parties to enhance offshore pipeline safety.

RSPA's Pipeline Safety Program

I would like to provide you with a brief overview of RSPA's pipeline safety program. Two substantially identical statutes provide the framework for our program; the Natural Gas Pipeline Safety Act of 1968 provides for federal safety regulation of facilities used in the transportation of natural gas and other gases by pipeline, and the Hazardous Liquid Pipeline Safety Act of 1979 authorizes the Department of Transportation (DOT) to regulate the safe transportation of hazardous liquids by pipelines.

Both Acts provide a regulatory framework for assuring pipeline safety consisting of two parts: (1) exclusive federal authority to regulate interstate pipelines and (2) federal responsibility for regulation of intrastate pipelines with provisions for state assumption of all or part of the intrastate responsibility. The cornerstone of the federal pipeline safety program is this partnership established with the states. Both Acts provide for a grants-in-aid program, the purpose of which is to encourage the states to adopt and enforce the federal regulations for intrastate

pipelines, including those located in offshore state waters. States may also contract with DOT to inspect interstate pipelines, although DOT remains responsible for the enforcement of the regulations. The RSPA's safety jurisdiction over pipelines covers more than 2,000 operators and 1.6 million miles of gas pipelines, and more than 200 operators and approximately 155,000 miles of hazardous liquid pipelines which transport petroleum, petroleum products, and anhydrous ammonia. Offshore pipelines account for approximately 13,000 miles of the above gas and hazardous liquid pipelines. The existing federal resources alone, without state involvement, could not adequately ensure the safe operation of all the existing pipeline facilities. As you may know, the State of Louisiana and the State of Texas participate in both the gas and the hazardous liquid programs.

The RSPA's Office of Pipeline Safety has been delegated the responsibility for carrying out the mandates of both Acts. The OPS is responsible for developing, issuing, and enforcing regulations for the safe pipeline transportation of natural (flammable, toxic or corrosive) gas, including associated liquefied natural gas facilities, and hazardous liquids (crude oil, petroleum products, anhydrous ammonia, and carbon dioxide) by pipeline. The regulations are designed to assure safety in design, construction, testing, operation, maintenance, and emergency response of pipeline facilities. In support of these regulatory responsibilities, and in addition to managing the Federal/State pipeline safety

partnerships, OPS collects, compiles, and analyzes pipeline safety data and conducts training programs for government and industry personnel in the application of pipeline safety regulations. The OPS also conducts a pipeline safety research program to support regulatory and enforcement activity and to provide the necessary basis for planning, evaluating, and implementing the natural gas and hazardous liquid pipeline safety programs.

With respect to the OPS inspection and enforcement program, the nation is divided into five regions. Each region is responsible for monitoring the performance of the state agencies participating in the Federal/State pipeline safety program, performing inspections of interstate gas and hazardous liquid pipeline systems as well as the intrastate facilities under direct federal jurisdiction. The OPS office in Houston, Texas, is responsible for administering our compliance and enforcement program in the Southwest, including offshore pipelines in the Gulf of Mexico.

The OPS has responsibility for approximately 200 offshore inspection units, of which 180 offshore units are assigned to the Southwest Region. (An inspection unit is defined as all or part of an operator's pipeline facilities that are under the control of an administrative unit that provides sufficient communication and controls to ensure uniform design, construction, operation and maintenance procedures for the facilities.) These offshore units

are operated by approximately 120 operators and contain over 13,000 miles of offshore pipelines.

In the past 5 years (through 1989), the accident statistics for offshore hazardous liquid pipelines included 18 accidents, 2 fatalities, and 1 injury. For gas pipelines over the last 5 years, there were 69 incidents, 18 fatalities, and 4 injuries. Very few of these accidents and incidents were caused by vessels; however, two of the three accidents resulting in fatalities involved fishing vessels. Charts listing the accidents/incidents, the pipeline operator, cause, deaths, and injuries are attached as Appendices A and B.

We know that the greatest risk to all pipelines is from outside force damage involving third parties, such as excavators--both the probability and the consequences have been demonstrated many times. Recognizing this, and the fact that OPS does not have statutory authority over third parties, Congress mandated in the Pipeline Safety Reauthorization Act of 1988 that RSPA study the issue of extending its jurisdiction to excavators. The RSPA expects to complete that study and send it to Congress in late Spring.

Offshore Regulations

The OPS has a number of current regulatory provisions that are specifically applicable to the Gulf offshore operations.

Generally, our regulations are designed to provide a consistent level of safety for all pipeline facilities. However, there are a number of areas involving offshore pipelines where we have applied more stringent regulations in order to protect this environmentally sensitive area and to protect life and property. For example, the regulations concerning offshore pipelines require that 100 percent of the welds must be nondestructively tested (typically by X-ray), when constructed, as compared to 10 percent of the welds in nonenvironmentally sensitive areas and nonpopulated areas. In addition, the regulations require that offshore gas pipelines must be purged, filled with an inert material, and sealed at the ends when abandoned. Likewise, abandoned offshore hazardous liquid pipelines must be purged of all combustibles and sealed. Another regulation requiring more stringent procedures for offshore pipelines deals with emergency shutdowns. Gas pipelines are required to be fitted with valves or other devices that can stop the flow of gas to the offshore platforms. Gas pipes coming off the platform risers must be protected from damage by vessels; usually this requires the operators to provide additional protection by designing the platform to protect the pipe.

The pipeline safety regulations covering onshore and offshore pipelines specify the depth to which pipelines must be buried at the time of construction. All new construction of offshore gas and hazardous liquid pipelines in 0-12 feet of water must have a minimum of 36 inches of cover. There is no requirement in the

pipeline safety regulations that the original depth of cover be maintained. Pipeline operators are required to patrol their lines periodically for the presence of unusual operating and maintenance conditions and to take corrective action if conditions are unsafe. However, this patrolling is generally done using aircraft--the regulations do not require a physical underwater inspection. However, when an operator learns that a pipeline is unsafe because of its potential to be damaged, the pipeline safety regulations require that the problem be corrected. Remedial action may include lowering the pipeline, adding more cover over the line, or otherwise protecting it against outside force damage. Unfortunately, the technology for surveying pipelines to determine depth of cover has not yet been demonstrated to be sufficiently accurate to justify a general industry practice nor a federal requirement.

Even though depth of burial is an important safety consideration, we have found that damage prevention programs employing "one-call systems" provide the best protection against excavation damage for onshore pipelines. Following our initial work with other concerned federal agencies (discussed more fully below), OPS will consider expanding requirements to cover offshore pipelines, specifically to recognize the risks posed by fishing vessels in shallow waters and other vessels whose operations may result in damage to pipelines.

Initiatives

The OPS has a number of initiatives underway in the regulatory and enforcement arena which we believe will address some of the problems that have been raised concerning offshore pipelines. In the regulatory area, in accordance with the Pipeline Safety Reauthorization Act of 1988, we will issue a Notice of Proposed Rulemaking (NPRM) this year proposing to require pipeline operators to keep current maps and records that show the location and characteristics of their pipelines, both onshore and offshore. The Pipeline Safety Reauthorization Act of 1988 also mandates that we require operators to provide maps of their pipelines to state agencies that request them. These maps are intended for use in state emergency response programs but could also be of value in a program designed to prevent accidents involving fishing vessels and pipelines.

Likewise, in the enforcement arena OPS has begun a number of initiatives to improve the safety of offshore pipelines. As of January 1, 1990, OPS assigned one senior pipeline inspector to offshore inspections in the Gulf of Mexico on a full-time basis.

In addition, in our Fiscal Year 1991 Appropriation request to Congress, we are asking for three additional inspectors for the Southwest Regional office. These positions are required to provide inspection capabilities for the additional 55 offshore inspection

units and the 78 onshore interstate inspection units identified in 1989. These additional inspectors are necessary so that the Southwest Region can meet OPS's inspection goal to inspect most offshore units on a 5-year interval except for those offshore natural gas units with a high hydrogen sulfide content. Offshore units transporting hazardous liquids which will be inspected on an average 3-year interval. Of course, OPS will inspect certain offshore operators as often as required for public safety, especially those operators with a history of violations, poor accident record, and poor rating under a computer based risk assessment tool which will be in full implementation by the end of the year.

The OPS is working with the Department of the Interior (DOI) to redefine our respective jurisdictions in the Gulf of Mexico under a Memorandum of Understanding (MOU) between DOT and DOI. Currently, the MOU sets forth each Department's responsibilities for the establishment and the enforcement of design, construction, operation, and maintenance regulations. The MOU also provides guidance for joint activities, such as coordinating research and development projects involving offshore pipelines, coordinating inspection activities, sharing inspection reports, and meeting at least once each year to review existing standards, regulations, and operating practices concerning offshore pipeline facilities.

In December, I directed my staff to review our offshore (Gulf of Mexico) responsibilities and to suggest changes that we may want to make to clarify the existing MOU. In the past, DOI's Minerals Management Service (MMS) and OPS have worked together to develop guidelines and oversee federal regulations applicable to offshore operators. We will continue to work to improve this relationship with MMS.

Clearly, RSPA must develop better coordination with our federal partners. The Northumberland accident was a catalyst that heightened our attention on the need to coordinate on safety issues that cut across agency jurisdictional lines. On February 14, 1990, OPS called together representatives of the United States Coast Guard, the MMS (part of DOI), the National Oceanic and Atmospheric Administration, and the U.S. Army Corps of Engineers to discuss our respective roles and identify possible actions we can take to enhance safety. The meeting agenda included: (1) explanations of each federal agency role regarding offshore pipelines and fishing operations; (2) gaining an understanding of how much we do and do not know about the risks posed in the Gulf of Mexico by the coexistence of pipelines and vessel operations; (3) determining the adequacy of the offshore pipeline inventory (e.g. the adequacy of maps and charts); and (4) establishing a mechanism for identifying the possible near-term and long-term solutions that the federal government should pursue.

As a result of that meeting, we are creating a special task force to develop solutions to the offshore pipeline problem. One major area of review will be whether we need to modify our regulations to require that pipeline operators inspect their offshore lines after hurricanes and severe storms as well as on a periodic basis. One of the difficulties with inspection is the inability of the available technology to accurately determine whether the lines are exposed or to measure the depth of cover. Part of the task force's review will necessarily focus on existing technology and how to accommodate new technology, as it becomes available.

Conclusion

In conclusion, I think it is important to note that even after the federal government has done what it can do, the likelihood of success--of the safe coexistence of fishing vessels and pipelines--will depend largely on the ability of the fishing industry and the pipeline industry to work together under an approach of open and full communication and cooperation.

Chairman Tauzin, and members of the committee, again I pledge to you the support and cooperation of RSPA in seeking solutions to these issues in a timely and effective manner.

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